

Highlights.

Including CHILDREN'S ACTIVITIES

MAY 1991 • VOLUME 46 • NUMBER 5 • ISSUE NO. 478 Founded in 1946 by Garry C. Myers, Ph.D., and Caroline Clark Myers

This book of wholesome fun is dedicated to helping children grow—in basic skills and knowledge—in creativeness—in ability to think and reason—in sensitivity to others—in high ideals—and worthy ways of living—for CHILDREN are the world's most important people.

Editor: Kent L. Brown Jr.

Managing Editor: Jennifer A. Stevenson, Ph.D.

Art Director: Rosanne S. Guararra

Senior Editors: Elizabeth Myers Brown, Christine San José, Ph.D., Tom White Science Editor: Jack Myers, Ph.D.

Coordinating Editor: Mary L. Heaton Associate Editor: Greg Linder

Assistant Editors: Marileta S. Robinson, Linda K. Rose, Jean K. Wood

Manuscript Coordinator; Beth Bronson Troop
Manager of Operations: Jan Keen

Production Coordinator: Debra A. Jenkin
Copy Editor: Rich Wallace Copy Director: Sharon Dunn Umnik
Senior Illustrator: Jerome Weisman

Editorial Offices: 803 Church Street, Honesdale, PA 18431. Contributors are invited to send original work of high quality—stories, articles, craft ideas. Editorial requirements on request.

Chairman: Richard H. Bell

CEO: Garry C. Myers, III President: Elmer C. Meider, Jr. Business Offices: 2300 West Fifth Ave., P.O. Box 269, Columbus, OH 43216-0269.

HIGHLIGHTS FOR CHILDREN (ISSN 0018-165X), incorporating Children's Activities, is published monthly, except bimonthly July-August (index in December issue). Single issues (current or back copies) \$2.95.

Parent and Child Resource Center, Inc., is an authorized sales agency.

Occasionally, offers of products from other companies may be sent to parents on our mailing list. Please write the Mail Preference Service at our business office if you do not wish to receive these offers.

Second-class postage paid at Columbus, Ohio; Toronto, Ontario; and at additional mailing offices. Copyright © 1991, Highlights for Children, Inc. All rights reserved. Canada Post Second Class Registration #9282.

Printed since 1957 by Arcata Graphics/Baird Ward, Nashville, Tennessee. Special non-glare paper manufactured since 1968 by Kimberly-Clark Corporation, Coosa Pines, Alabama.

Available in microform from University Microfilms Inc., Ann Arbor, MI 48106.

SUBSCRIBERS: Please send CHANGE OF ADDRESS information six weeks before moving, to HIGHLIGHTS FOR CHILDREN, Dept CA, PO Box 269, Columbus OH 43216-0269, Send old address (recent address libel is best), new address, old and new zip codes, and new telephone number. Or call (614488-0695, Collect calls not accepted. POSTMASTER: Send address changes to HIGHLIGHTS FOR CHILDREN, P.O. Box 269, Columbus, OH 43216-0269, CANADA POST; Send address changes to HIGHLIGHTS FOR CHILDREN, P.O. Box 1255, Georgetown, Ontario L7G 4X7.

AWARDS











National Association for Gifted Children—Certificate of Merit. National Conference of Christians and Jews—Certificate of Recognition and Brotherhood Award. Freedoms Foundation—For Outstanding Achievement in Bringing About c Better Understanding of the American Way of Life. National Safety Council—Exceptional Service to Safety. Member—EDPRESS.

From the Editor

When friends recount a funny situation and find they aren't convincing you it really was funny, they'll often say, "I guess you had to be there." They know their telling doesn't have the same impact as "being there."

A quality I call "being there" is important to us at HIGHLIGHTS. We want readers to feel as if they are right there, watching the scene.

We search for articles with this special quality. It's fairly easy to spot in nonfiction. First-person telling is often a clue. But the author goes beyond that to draw the reader into immediate personal participation.

In "Bats," pages 22-23, wildlife biologist Susan Quinlan conveys plenty of facts. But she also involves us deeply in her story. We live it with her.

Don Reed has spent a lot of time in the water—so much, we've often jokingly wondered if he is really an amphibian. And in "Dolphins to the Doctor," pages 40-41, we join him in the watery world he knows so well.

We are grateful for writers like Susan and Don who offer that wonderful "you are there" dimension to our HIGHLIGHTS readers.

> Kent L. Brown Jr. Editor

Find the Pictures

Can you find each of these pictures at another place in this book?











Contents

A Guide For Parents and Teachers

COLLUCATOR	F	are	21108	sal	ia i	read	cne	1.8
4 The Half-a-Chance Lad by Bethea verDorn	SF							
6 The Spinning Earth by Aileen Fisher			•					
7 To the Editor		•						
8 Barnas Dag: Norway's Special Day by Heidi N. Cantrell				•				
10 The Timbertoes by Sidney Quinn	•							
11 Thinking								
12 Science Corner, Check and Double Check		•		1000				
13 In the Middle of the Night by George Edward Stanley								
14 Hidden Pictures by M. J. Manning	•							
15 Fun with Phonics							100	
16 One Voice Singing by Jeanne Field Olson			•					
18 Science Letters answered by Jack Myers, Ph.D.	P N							
19 Matching, Character Builder		•				100	6	
20 Our Own Adventures	E		•	880				0
21 Andy the Apple Lover by Luann Williams	0							
22 Bats: Night Fliers on Silent Wings by Susan E. Quinlan			•					2000
24 The Softball Switcharound by Helen Kronberg								
26 Things to Make					100			
28 The Best Baker by Connie Elliott		0		200				
30 Jokes, Goofus and Gallant								8 7/2
31 For Wee Folks								•
32 Here a Road, There a Road by Connie L. Ellefson								
34 Our Own Pages		•			100			0
36 Aloysius and the Guided Muscles by Sydney K. Davis		28						
38 Riddles, Camp and Carry								•
39 But I Did Not Say Anything by Beth Bahler	2.8	•				n eo		
40 Dolphins to the Doctor by Don C. Reed								
42 Headwork	0	•						
43 Tricks and Teasers		•	•			100		
	Preparation	Easy	More	The	Science &	The	Moral Values	Thinking
	pa	sy	re		en		ra	In
	ra	Re	A	Nation	ce	Arts	V	1
	tio	Reading	dv	io		CO.	2	0.0
	n	iii	an	n a	Z		ues	and
	for	00	Advanced	and	Nature		J.	1000000
					re			Creating
	Reading		Reading	the				ati
	din		di	N				ga
	90		ga	World				
				D				



By Bethea verDorn

've come about the cook's job," John told the gray-haired man in the ranch office.

The man looked up and cleared his throat. "You saw my sign?"

"Aye. It said, Cook wanted for shepherd. See Mr. Griggs at Blackstone Ranch. Leaving town June 1, 1928. That's tomorrow." John had counted the days until he could get to the ranch. "Are you Mr. Griggs?"

"I am. And who might you be?"
"John Mackie, sir. My pa and I
come from Scotland."

"Been in Montana long?"

"Almost six months. Getting settled so we can send for Ma and my wee sisters," John said.

Mr. Griggs glanced at John's blackened hands. "You work in the mine?" he asked.

John slipped his hands into his pockets. "Aye, loading coal with my pa." John hesitated. Should he tell Mr. Griggs how much he hated the coal dust and the damp chill of the coal mine? "But I'm looking for a change," he said simply.

Mr. Griggs frowned. "Son, this is a man's job. Mighty lonely grazing sheep. Long days, hard work—but quiet. Not much excitement for a lad like you."

John made himself as tall as he could and looked straight at Mr. Griggs. "I'm not afraid of hard work. I don't mind the quiet. And I can cook," he said. "Just give me half a chance."

The shepherd smiled. "I like you, son. You don't waste words." Then he paused. "The job's still open. It might as well be yours. If your father approves, report here tomorrow. We load at dawn."

John's father approved, but not without a warning. "Don't go wrong, laddie. Lose this job, and you'll have no job at all. Then there won't be money to send for your ma and the wee girls."

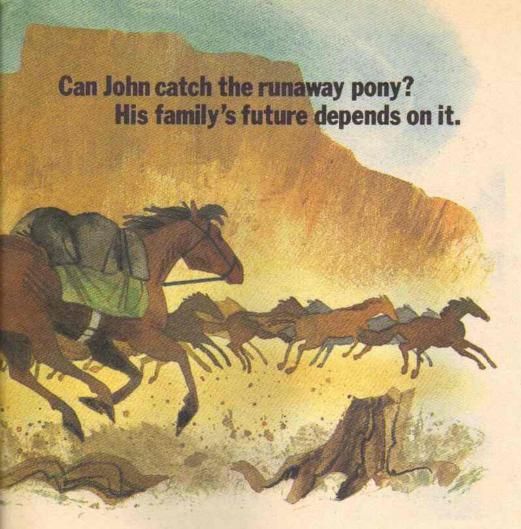
"Aye, Pa. I know." John raced to pack the few clothes he owned. Tomorrow he would be on his way to the mountains!

The next day at dawn, the sheep were loaded into cattle cars for the journey west. By noon the train had climbed into the towering Rocky Mountains. It stopped at a small station, where John's first chore was to fetch Bruce, the saddle pony.

"Meet me and the herd at the clearing two miles up the tracks," Mr. Griggs called to him from the caboose. The train pulled out.

Bruce was waiting in the corral, loaded with a pack saddle of camp gear. The stationmaster greeted John with a doubtful gaze. "I didn't expect a boy," he said. "Think you can handle Bruce? He's a feisty one."

"Aye, I can handle him." John



led the pony out of the corral and began the long walk up the tracks. Halfway there, he stopped. "Bruce, how about a wee rest?"

Bruce snorted and kicked a hind leg. "Now don't you be feisty, Bruce. What's the matter?"

John stroked the pony's neck, but Bruce was jumpy. He pawed at the ground and pranced in circles. John held the rope tight to keep Bruce under control. Then, from the tracks behind them, he heard a rumbling noise.

"So that's why you're feisty. Don't worry, laddie, I won't let any trains run us over." He led the nervous pony away from the tracks and into the woods nearby.

The noise grew louder. Bruce grew more and more agitated. There was a deafening roar, then a thick cloud of dust appeared. This was no train! John's heart pounded, and he gripped Bruce's rope. Fifty or more wild horses thundered past on the tracks.

Suddenly Bruce bolted. The rope burned John's gloved hands as the excited pony dragged him through the woods. "Whoa, Bruce! Slow down!"

John's clothes were ripped by snapping underbrush. His bare arms stung with scratches. His shoulders ached. How much longer could he hold on?

He slammed against a tree. The rope lurched painfully out of his grasp, and Bruce galloped off. John lay gasping for breath. His father's warning pounded in his ears: Don't go wrong, John, or you'll have no job at all.

Staggering to his feet, he was still doubled over from the blow. If only he could run away like the pony, so he wouldn't have to face Mr. Griggs. How could he explain losing Bruce and all the camp gear? His only chance was to find the pony. His family's

future depended on it.

John stood upright and called out, "I'll find you, Bruce!"

Half a mile down the tracks, John spotted the pony. He could make out the pack saddle on Bruce's back. "Sneak up on him. Don't spook him again," John told himself. He stepped ahead cautiously, tie by tie.

That's when he saw it. First the smoke, then the black engine of a train heading right for Bruce. But Bruce wasn't moving.

"Run, Bruce, run!" John yelled. He raced down the tracks toward the pony as the train approached from the opposite direction. "Get out of the way!" he shouted.

Bruce didn't move. Now John saw why. The pony's rope was wedged tight between a tie and the rail. Bruce couldn't move.

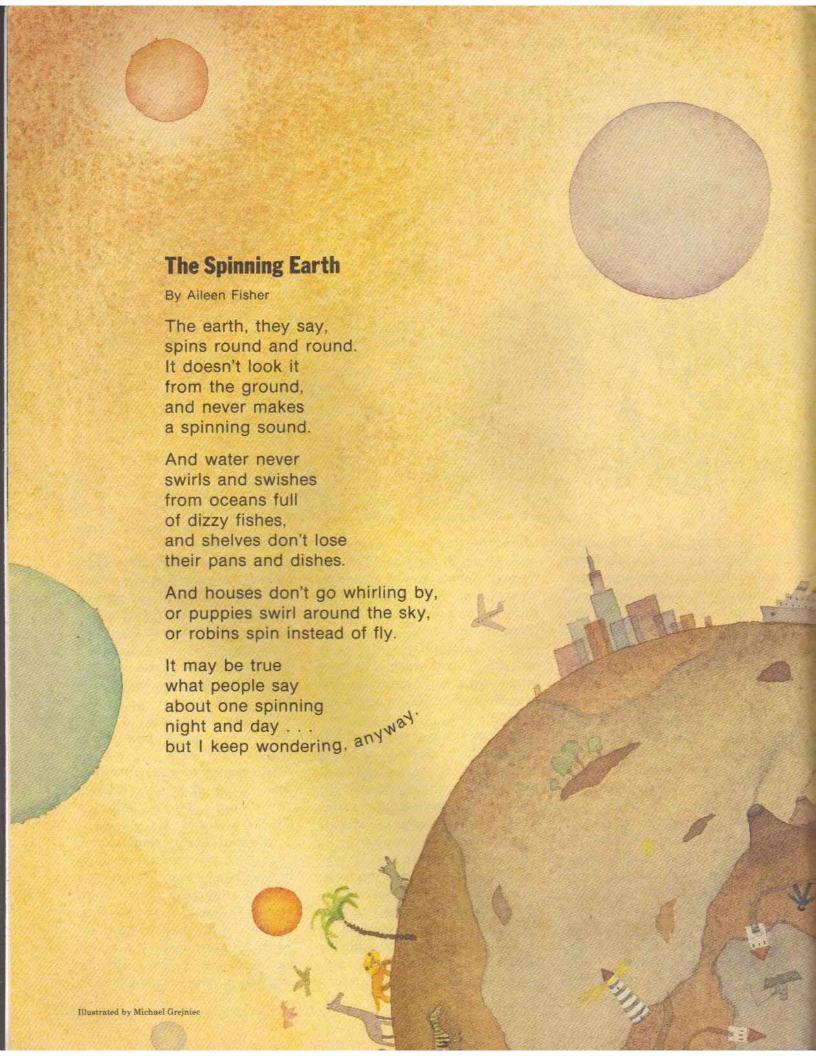
The train whistle blared. Panic flashed in the pony's eves. John grabbed the taut rope and pulled, but his weakened arms couldn't free it. How could he get Bruce off the tracks?

The pack saddle! John rummaged through it wildly. There had to be a knife with the cooking gear. He found the knife, pulled it out, and slashed through the rope. Just as the train barrelled down upon them, he yanked Bruce away from the tracks. The train roared past.

Panting, John glared at Bruce. "Feisty or no, this time you're coming with me!"

The sun was setting when they finally arrived at the clearing. "Been waiting for you, lad!" Mr. Griggs shouted. He stared at John's torn clothing and battered arms. "What happened? Looks as if wild horses ran you over."

"You could say that." John smiled. No need for explanations. He was out of the coal mine for good. He had taken on a man's job. And now he knew that he could do it, given half a chance.



Learning to Sew

I'm having a little trouble with sewing. How can I learn to sew all by myself?

Katy U., Oregon

Learning to sew takes patience and practice, but you'll be able to do it. Ask one of your parents or a librarian to help you find sewing books with directions for simple projects. If there is a sewing class or sewing club for kids in your area, you might have fun learning with others instead of trying it all by yourself.

Saving Money

I have a problem with saving my money. I always spend it on toys or candy. Do you know a way I could try to save it? If I spend all my money, I won't be able to get anything I really need or want!

Jody C., New York

Many of our readers have the same problem. I know that it's tempting to spend your money, but it's a smart idea to save some of it for something special.

Talk to your parents to see if they will help you open a savings account at your local bank. Deposit a portion of your money. keeping some for spending, and do this every time you receive money. The bank will give you a

the Editor

savings passbook that shows how much money you have in your account. It's fun to see the amount increase as you deposit more money. The money will also earn interest, which is a small amount the bank pays you for depositing your funds.

Opening a bank account is one way to set aside money. Your parents or your teacher can help you come up with other ideas.

Broken Leg

I have a broken leg, and I can't play with my friends. They blame me for breaking my leg. Now I don't have any friends.

Daniel M., California

You may not be able to play outside with your friends, but you can invite them over for an indoor visit. Maybe you can work on homework, do a puzzle, or build a model together. You can also do these things alone, if your friends can't come over.

They may be upset because they miss you when they're playing together. If you invite them over and have fun with them indoors. I think they'll stop blaming you and all of you will become good friends again.

Trusting a Stepdad

My mom got remarried, Now I feel like I don't trust my stepdad. I'm afraid that I won't ever go to him with any problems.

A. G., Louisiana

It takes a while to get to know and trust someone. Give your new stepdad more time before you make up your mind about him. Meanwhile, talk with your mom about your feelings.

It's natural not to take your problems to someone unless you know them well. You might get to know your stepdad better by asking him to help you with some homework or by helping him with a project he's working on. In time, you may be able to share a problem with him.

When you write to us, we like to know who you are. Please include your name, age, and full address (street and number, city or town, state or province, and Zip Code). Mail to:

> The Editor HIGHLIGHTS FOR CHILDREN 803 Church Street Honesdale, PA 18431

Editorial Advisory Board

Carl M. Andersen, Ph.D., Chairman, Department of Home and Family Life, Texas Tech University, Lubbock.

Jay M. Arena, M.D., Professor of Pediatrics. Duke University Medical Center, Durham, North Carolina.

Henry A. Bamman, Ph.D., formerly Professor of Education, California State University, Sacramento

Martha Boaz, Ph.D., Dean Emeritus, School of Library Science. University of Southern California, Los Angeles.

Rabbi Jerome D. Folkman, Ph.D., Rabbi Emeritus of Temple Israel, Columbus, Ohio.

Edward C. Frierson, Ph.D., Department of Special Education. George Peabody College for Teachers, Nashville, Tennessee

Mathilda A. Gilles, Salem, Oregon, Past President, Department of Elementary School Principals, N.E.A.

John Guidubaldi, Ed.D., Chairman, Department of Early Childhood

Education, Kent State University, Kent Ohio.

Anne E. Hughes, Ph.D., College of Education, Our Lady of the Lake University, San Antonio, Texas. John M. McInnes, Ed.D., Professor, Ontario Institute for Studies in

Education Toronto

Gladys M. Rossdeutscher, formerly Faculty Member, Eastman School

of Music, Rochester, New York

D. J. Sanders, D.D.S., formerly Head, Department of Pedodontics,
College of Dental Surgery, University of Maryland, Baltimore. The Very Reverend Francis B. Sayre, Jr., Dean Emeritus, Washington

Cathedral, Washington, D.C. Sister Mary Barbara Sullivan, R.S.M., Educational Consultant, Sisters of Mercy, Belmont, North Carolina

E. Paul Torrance, Ph.D., Advisor, Torrance Studies for Gifted, Creative, and Future Behaviors, University of Georgia, Athens,

Hooray! Today is Constitution Day!



Barnas Dag: Norway's Special Day

By Heidi Nordby Cantrell

"Syttende mai er vi saa glad i, moro vi har fra morgen til kveld." "The Seventeenth of May, how we love that day. Fun we are having from morning till night." The Norwegian song came back to me as I glanced at the calendar.

Yes, it was indeed the Seventeenth of May. Since I moved to the United States a few years ago, this day has always made me feel a little sad. In the U.S. it is just another day, but when I was growing up in Norway, May 17 was the grandest day of the year, next to Christmas.

May 17 is Constitution Day in Norway. On this day in 1814 Norwegians got their own constitution and became independent from their southern neighbor Denmark. Norwegians also celebrate spring on May 17 because by this time the long, hard, cold, and snowy winter is over.

I can still remember when my younger brother Paal and I woke our sleepy parents at the crack of dawn one Constitution Day. We heard the neighborhood children loudly trying out their horns and toys, and we quickly got dressed in our new spring clothes. We wanted to test our noisemakers, too. Noise is always a big part of Constitution Day.

Then I heard my father's voice resounding through the house. "Time to raise the old red, white, and blue." That was our flag. Although the Norwegian flag has the same colors as the American one, it is very different.

"Wait for me, Pappa." Raising the flag was one of my favorite May 17 traditions, and I bounded down the stairs. "Don't raise it without me." I found Pappa standing beside our tall white flagpole holding the beautiful flag. Paal was dancing around him full of excitement.

"You're not going to need a coat over that pretty new dress today, Heidi," Pappa said as he looked up through the birch trees at the bright blue sky.

After breakfast Paal and I headed off to school. School on a holiday? Of course. That was where everything was happening.

The main event on this day in Norway is the Children's Parade.



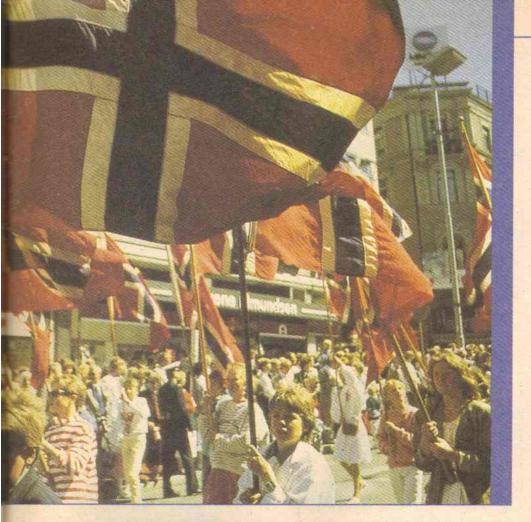
Hundreds sing, "We love this country."

0 0 0 0 0

A parade starts from every elementary school throughout the nation. As the parade winds its way through the town, it picks up dozens of spectators.

In some towns parades detour past hospitals and nursing homes. Patients crowd to the windows and balconies to wave to the marchers.

In places where there is more than one elementary school, several parades meet and form one big parade. In Oslo, the capital of Norway, so many schools join together that the parade takes more than two hours to pass the palace balcony where King Olav and his family stand waving. Norwegians love their Children's Parade.



of spring added to the festive spirit.

When we reached our destination, the local National Church of Norway, we were whisked into a celebration of trumpets and voices singing the national anthem. The flag bearers in the front of the church lifted the flags high up in the air, and hundreds of voices rang out "Ja, vi elsker dette landet." "Yes, we love this country." I always get a special feeling inside when I hear that song.

We marched back to school at the close of the special church service. We were so excited! It was time for games and entertainment, and for all the ice cream and hot dogs we could eat. Oh, the Seventeenth of May, I get a longing in my heart when I look at that day on my calendar.

May 17 is also called National Day and Children's Day, or Barnas Dag, in Norwegian. As Paal and I marched off the school grounds that day behind the school banner and the school band, we waved our flags wildly, sang songs, and shouted, "Hurra for syttende mai." "Hurray for the 17th of May." That is what almost every child in Norway has done since the day of the very first Children's Parade in 1870. There were no soldiers, no tanks or guns, and no floats-just children happily marching.

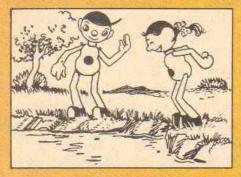
All along the route people watched the parade and waved their flags. Everyone was dressed in their best clothes. Many wore a bunad, a national costume typical of their particular region in Norway. Flags and flowers were everywhere, and the sweet smell

Norway celebrates with a Children's Parade.



THE TIMBERTOES

By Sidney Quinn



It's time for a swim.



Mabel dives in.



Tommy dives, too.



Here comes Pa.



Ma picks fresh berries.



"Come on in," says Pa.



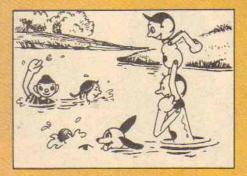
Spot jumps in.



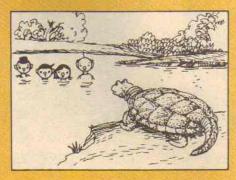
"You too, Ma!"



Ma swims, too.



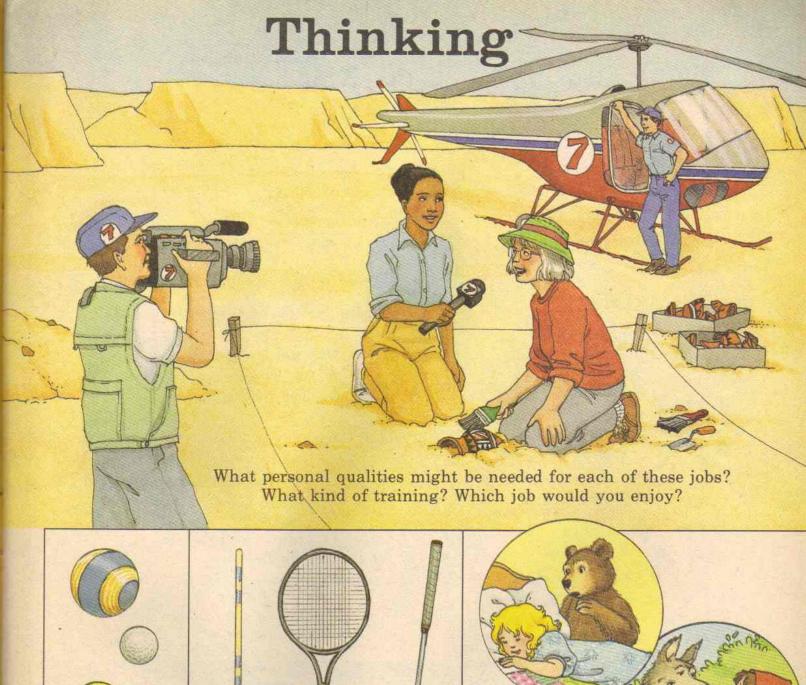
Everybody has fun



except Snapper the turtle.



He doesn't like company.



 Match each ball with the equipment used to move it, naming the different games.

- What other games use special equipment to move a ball?
- Which games use only parts of the body to move a ball?
- What's good about using special equipment?
 What's bad about it?



You know what the animals do in these nursery tales.

How might each of them behave in real life?



Girl: Are you really a star?

Sun: Yes. I'm a star like the stars you see at night. But I am a lot closer to Earth than those other stars. I'm so close that you can feel my heat and see by my light.

Which could you buy with money?



Could you buy playmates? A parent's love? A puppy?

Tongue Twisters

Try to say each of these tongue twisters rapidly three times.

- Which thrush whistles?
- Five fat frogs fell flat.
- Six sick sheep stood stranded in a snowstorm.
- Carrie carried coffee in a copper coffee cup.
- Ben blew big beautiful bubbles.

What would it be like . . .

if all animals could talk as people talk?

if it didn't rain anywhere in the world for a whole year?

if nobody could read?

if people had wings and could fly?

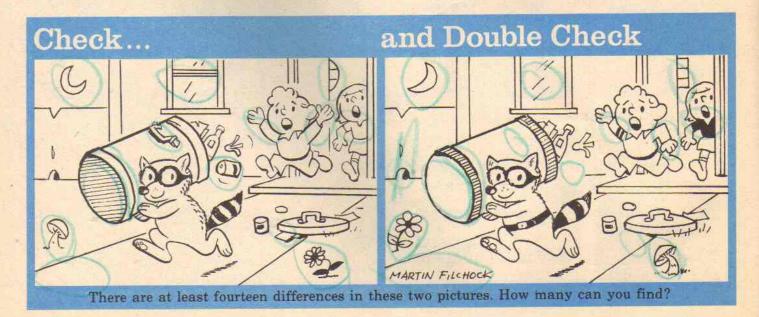
if there were no radio or TV?

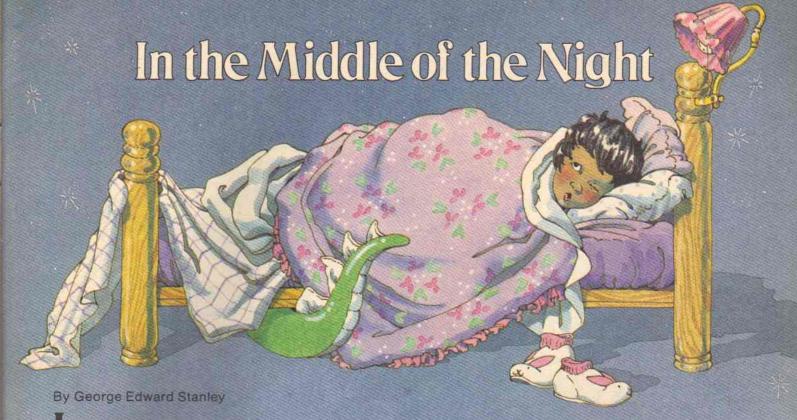
if babies could walk as soon as they were born?

if the sun shone all day and all night for a year?

if all the people of the world were under ten years of age?

if all animals with four legs walked on their hind feet?





In the middle of the night Mary Margaret opened her eyes. She had heard a funny noise in her room. What could it be?

She turned on her lamp. Then she got out of bed and put on her robe and slippers.

But all she found was her teddy bear. So that is where he has been hiding, she thought. She picked him up and set him down in a little rocking chair.

Then she looked inside her closet. But all she found was a pile of dirty clothes. Her mother had told her to put them in the hamper, but she had forgotten. Mary Margaret picked up the clothes and put them in the hamper. Then she heard the noise again.

She looked under her bed. That's where she should have looked in the

first place. That's where she found the dragon!

It was sound asleep. It also was snoring loudly. But it looked so comfortable that she couldn't ask it to leave.

Mary Margaret thought for a minute. Then she shook the dragon's shoulder. The dragon opened its sleepy eyes and looked at her.

"If you are going to sleep in my room, you will have to be quieter," Mary Margaret said. "OK?"

The dragon nodded its head. Then it closed its eyes again.

Mary Margaret put one of her pillows under the dragon's head and covered it up with one of her blankets.

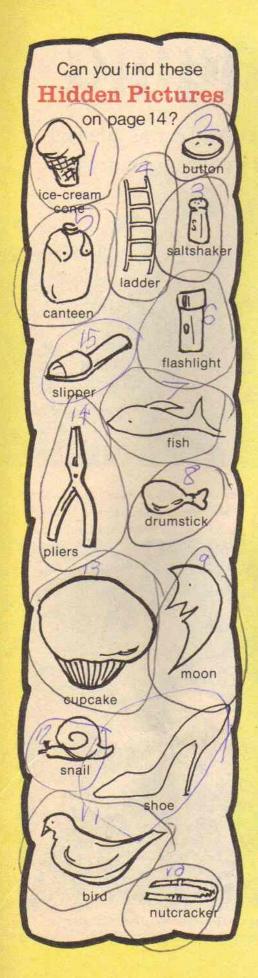
Then she took off her robe and slippers, got back into bed, turned off the lamp, and went back to sleep.

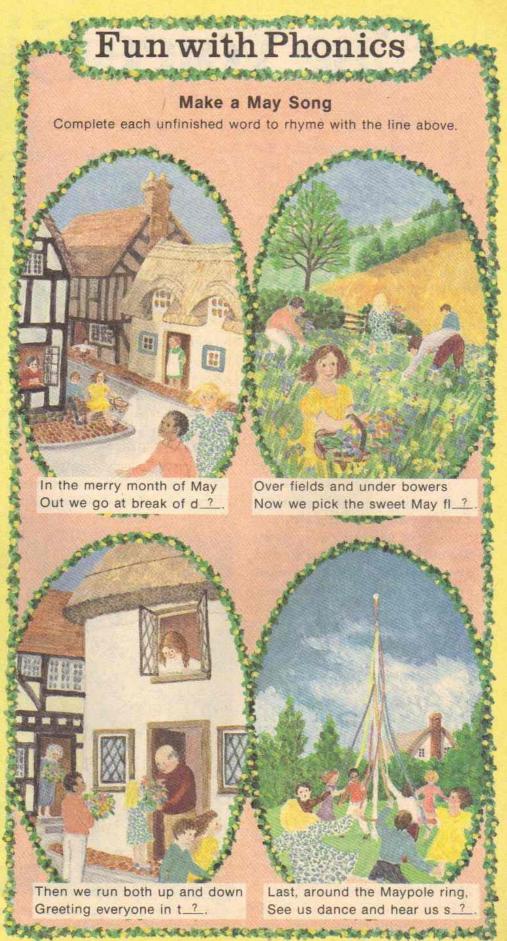
Hidden Pictures

The Soccer Match



In this big picture find the ladder, nutcracker, bird, button, ice-cream cone, drumstick, shoe, saltshaker, pliers, flashlight, cupcake, fish, slipper, snail, canteen, and moon.





One Voice Singing

By Jeanne Field Olson

a s the curtains opened on the second act of Verdi's opera A Masked Ball, Marian Anderson stirred the witch's kettle of "magic brew." Her dream of singing with New York City's Metropolitan Opera Company had come true. Marian's role as an old sorceress was a small one, but her achievement as the first black soloist to sing with the Metropolitan was huge. It was 1955. Now the way was open for other talented black singers to follow.

Marian Anderson had struggled to become a concert singer at a time when segregation laws and custom kept American blacks out of many schools and occupations.

Born in Philadelphia in 1902, Marian, as a little girl, had thought of becoming a surgeon. She often bandaged her dolls and playmates, whether they needed bandages or not. But soon music became her life.

Marian loved to sing. She began singing in a junior church choir when she was six. The year she turned thirteen, she joined the senior choir and continued as a singer in both groups. Marian gave many concerts while still in high school. She divided her first five-dollar fee by giving one dollar each to her two sisters and two dollars to her mother, keeping one dollar for herself.

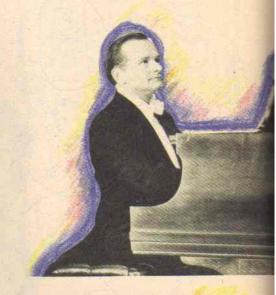
When Marian tried to enroll at a Philadelphia music school, she was told: "We don't take colored." Marian was deeply hurt, but she did not give up.

Philadelphia neighbors and

Nothing could silence a singer as talented and determined as Marian Anderson.

church friends held a concert to raise six hundred dollars for private voice lessons for Marian. When the money was gone, her teacher, Guiseppe Boghetti, agreed to teach Marian with no payment at all. Later, she was glad to be able to repay him.

After she graduated from high school, Marian presented concerts in the South, mostly at black colleges and churches. She was upset by the Jim Crow laws that kept blacks and whites segregated. Blacks were expected to ride in separate railroad cars, which were dirty, poorly lighted, and poorly ventilated. Blacks were not allowed to eat in the dining cars and could not reserve sleeping



berths on the trains.

Marian was always a worker.

As a child, her first job was



When Marian was not allowed to sing at Constitution Hall, Secretary of the Interior Harold Ickes (left) set up a concert at the Lincoln Memorial.



scrubbing neighbors' steps for a few cents. She bought candy with her first nickel but soon began to save for a violin. With her mother's help, Marian learned to alter clothes that were given her. Together they made the gown for her first concert.

Marian worked even harder to become a better singer. She was born with a rich contralto voice, but she knew that was not enough. She learned how to control her voice with its unusually wide range from low D to high C—three octaves! Because so many beautiful songs were written in languages other than English, Marian studied those languages. As her teachers advised, she learned what the songs meant so she could sing them with feeling.

Marian continued studying voice and gave concerts in Europe as well as in America. Meeting the great Finnish composer Jean Sibelius meant almost as much to her as the successes in her concerts there. In Italy, Arturo Toscanini, one of the great orchestra conductors of all time, heard Marian sing. He told her, "Yours is a voice such as one hears once in a hundred years."

Such praise thrilled Marian and made her work even harder. She carefully chose songs for each concert audience. A typical program included classical songs from Germany, France, Spain, Italy, and England or America as well as Negro spirituals.

Marian's fame in Europe helped her win recognition in America. She gave concerts in America's most famous concert halls, Town Hall and Carnegie Hall in New York City. But still she was not welcomed everywhere.

In 1939 the Daughters of the American Revolution, who owned Constitution Hall in Washington, D.C., refused to allow Marian to sing there because she was black. News of the refusal spread fast. As a form of protest, Eleanor Roosevelt, the wife of President Franklin D. Roosevelt, resigned her membership in that organization. But Marian was soon scheduled for a concert at the Lincoln Memorial instead—under the sponsorship of government officials and prominent citizens.

n Easter Sunday more than seventy-five thousand persons, black and white, gathered at the Lincoln Memorial. Marian began the open-air concert by singing the national anthem in her velvety rich and powerful voice. Many thousands more listened to the radio broadcast of that concert, one of the high points of Marian's career.

Marian Anderson once said to a newspaper reporter, "My voice belongs to America. It grew here, just as I did." She refused to sing in segregated concert halls. Soon more concert halls were open to all.

She made best-selling records of Negro spirituals, Christmas carols, old American songs, and operatic arias. Finally, she was asked to sing with the Metropolitan Opera.

In January 1961 Marian sang at President Kennedy's inauguration. Her expressive contraltoreminded everyone that America is enriched by the talents of all its citizens. In 1958 President Eisenhower chose Marian Anderson as a delegate to the United Nations. Later, President Johnson honored her with the Presidential Medal of Freedom.

Dignity, honesty, hard work, and faith, as well as great talent, helped Marian Anderson rise above prejudice. She led the way for others to follow. Science Letters

Answered by Jack Myers, Science Editor

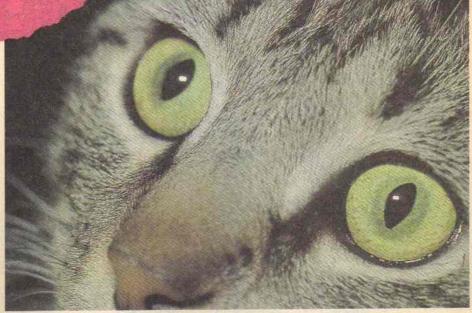
Energy Sources

I have learned that we use fossil fuel to produce energy. I have also learned that we must use it wisely so we don't run out. What will happen when we run out of fossil fuels?

Lynn Hull-Tipton, Indiana

People have been wondering and even worrying about that for a long time. Scientists are working to develop other sources of energy. There is solar energy—we need to get more useful energy out of sunlight. There is wind energy—we need to learn how to use it better. There is geothermal energy—we need to get more heat from deep down in the earth. There is nuclear energy—we need to find safe ways to use it. And, of course, we need to learn to use all energy more carefully.

I think we will learn how to do all those things, and you will see during your lifetime great changes in our use of energy.



Cat's Eyes

When I looked into my cat's eyes, I saw myself without any color. Does that mean cats can't see color?

Amanda DiBart-New York, New York

Seeing yourself in your cat's eyes really means seeing a reflection. You see light bouncing back—just as from a mirror—from the shiny front surface of the cat's eyes. Not much light is reflected that way, and the picture that

you see is so dim that you may not see any color in it. So your observation is telling you about what your eyes see, not what the cat's eyes see.

Color vision in cats has been studied. It seems that they are good at seeing differences between blue, green, and yellow colors. But they are not very good at seeing the differences between yellows and reds.

Water Vapor

I already know that water evaporates into the sky and comes down as rain. But when and how does the water vapor become water?

> Edmund Chou-Bayside, New York

Here's one way you can see water being formed from water vapor. Fill a glass with ice and water and make sure it is dry on the outside. Put the glass on a saucer and just let it stand there. It will slowly collect liquid water on its surface by condensing water vapor from the air around it. The change of gas (water vapor) to liquid happens right at the cold

surface of the glass.

Another way is to watch your breath on a cold day. The air you breathe out has lots of water vapor that has evaporated from the warm, wet tissue of your lungs and mouth and nose. Once that warm air gets out in the cold, it no longer can hold so much water vapor. Then the water vapor condenses by changing into little water droplets so you can "see your breath."

That same idea works up in the sky to make the water droplets of a cloud.

Water is very tricky in the way it can change back and forth between being a gas or a liquid.

Snakes

How do snakes climb trees?

Jami Marks—Houma, Louisiana

After thinking about your question, I realized that I have never seen a snake climb a tree. And I can't find any report that provides an answer. So let's think how a snake might do that.

Most snakes have very rough scales on their undersides. And most trees have a rough bark or little rough places. So I suppose a snake's scales can catch hold on the bark.

Of course, if it's just a small tree that a snake can wrap around, then it has a way of pulling in tight and working its way up.

Head, Hands, or Feet?

In which of the following, do you use your head most? In which do you use your hands or feet and other parts of your body?

- washing the dog
- composing a poem
- going high on a swing
- throwing a ball
- doing a crossword puzzle
 wearing a hat
- smelling a rose
- o dividing 360 by 24
- swimming
- riding a bike
- eating a sandwich
- playing a record



"I don't know why you have to return the money to Mr. Wilson. It's his fault that he gave you too much change."

"The money doesn't belong to me. I would be cheating Mr. Wilson if I didn't return it, even though it was his mistake."

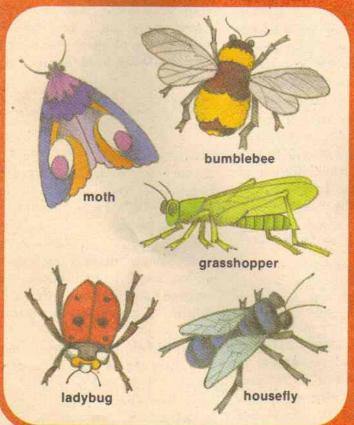
What am I?

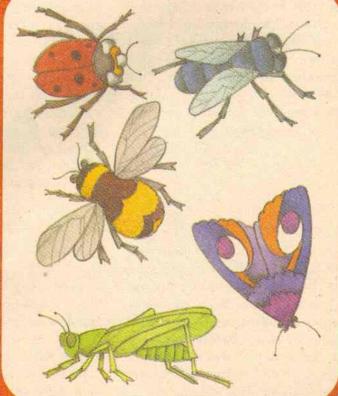
I grow on a vine.

I grow very fast.

My outside is green when I am young And often turns yellow when I am old. I'm neither sweet nor sour. But I do make good pickles.

Matching Look at each insect on the left. Find the one like it on the right.





Today I Ski, I Think

Today I went skiing with my dad and brother. On the first run I fell ten times and got bruises all over me. The second run was almost perfect until I stumbled over my brother. The third run my brother stumbled over me. The fourth run I was skiing through the trees, and I ran smack into one. I broke my nose.

The fifth run was perfect. Then we went to the round house. I got hot cocoa. I spilled it all over my brother. He was mad, mad, mad! On the sixth run, going up the lift, I lost my pole. So I skied without one pole. On the seventh run, going up the lift, I lost my ski! So I skied without one ski and one pole.

On the eighth run, if there was an eighth run, we were looking in the lost-and-found for my lost ski and pole. We never found them. On the ninth run, I was going through the moguls. I went off one, and I landed on someone! I almost broke her back. On the tenth run I broke my leg. I went down in a body basket. I was halfway down when someone swooshed in front of me. The body basket tipped over, and I broke my arm. I made it the rest of the way down.

Mary Lombardi, Age 7 Salt Lake City, Utah

My Snorkeling Adventure

I started my adventure in a boat in the ocean. My mom and dad and their friends had jumped off the boat to go scuba diving. When they came back, we would go to a picnic on a beach a kilometer away. Before they went in the water, I decided that I would go on another adventure. My neighbor, Jim, and my sister, Kara, were coming with me. I got my socks on (so my flippers wouldn't fall off!) and then my

Our Own Adventures

Here are some of the adventure stories you've sent us. We had fun wondering which might be true.

Now we have two requests. First, please tell us about adventure books you think our readers would enjoy. Second, please send us some of your own stories about friends. They can be real or imaginary, anything you choose.

Include your name, age, and complete address (street or box number, city or town, state or province, and Zip Code). Mail to:

HIGHLIGHTS FOR CHILDREN 803 Church Street Honesdale, PA 18431

flippers. Then I put on my mask and snorkel. The driver of the boat put down the ladder, and we climbed down into the cold water. Jim grabbed our arms, and we started going.

I looked down and saw only fish. It felt and looked like we were going very slow, but we were going very fast with the current. The water got colder and colder while we were swimming toward the rocks. We started seeing corals and funny-looking fish. I saw four barracudas, two sea urchins, one dog snapper, one school of blue angel fish, and fourteen sea fans. In a few minutes I was at the beach.

Adam Loftin, Age 8 Managua, Nicaragua

My Garbage Can Story

As of today I am ten years old. When I was one, my mother and father gave me a baby blanket. It was my prized possession. I kept it with me until I was nine.

When I turned nine we moved to a different town. I miss my friends there, but I love it here. The morning we left, I lost my baby blanket. I haven't seen it since. I miss it! There were great plans in store for that baby blanket. For I wanted to give it to my daughter someday.

One day my friend called me from the old neighborhood. She explained that construction workers were tearing down our old neighborhood. I went to take one last look at the old neighborhood with my parents. There was not much left to see. Some empty houses, filled garbage cans, and a few rundown shops were all that remained.

Something was flapping in the wind. I wondered what it could be and where it was coming from. It was hanging from the side of one of the filled cans. It looked like a rag. Could it be my baby blanket? That was impossible, for it was a year since I had lost it. I rushed over and jerked it out. It was my baby blanket! It was dirty and ragged, but it was still my baby blanket. I washed it. I am very glad and pleased that I found it-or did it find me? It really doesn't matter. For once a garbage can held something special.

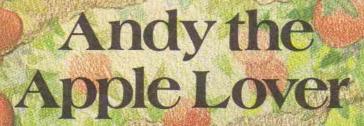
> Stacey Lang, Age 10 Bennettsville, South Carolina

My Adventure in the Jungle

One day I was walking through the jungle, and I saw a rattle-snake, so I ran away. Then I saw a ferocious tiger. It did not see me, so I crept away. Then a monkey swooped down and landed on my head. I put it down and walked away. A parrot said, "Hello." I chuckled and walked away.

But there was one more animal I wanted to see before I went home. A bear! So I went to a bear cave and there was a bear. It growled at me. So I ran away as fast as I could!

Tyler Joseph Montgomery, Age 7 Palo Cedro, California



By Luann Williams



Andy loved to eat apples. Andy's mom









kept apples in a big bowl just for him.



Mom was surprised to see Andy take only two bites.



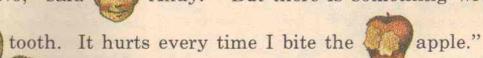


"Is there something wrong with the apple?" she asked.





"No," said Andy. "But there is something wrong with my





Mom looked into Andy's mouth. "Your tooth is





loose!" she said with a smile.



"No more apples for a while, I guess," Andy said sadly."



"What will I eat now?" Then Andy looked at the





and began to smile. "I know!" he said. "I could help you make a big



bowl of applesauce!"

Illustrated by Monica Ice

BATS

Night Fliers on Silent Wings

By Susan E. Quinlan

change of guard occurs when darkness falls. The birds that keep insects in check during the day retreat to rest at night. As they disappear, the night fliers emerge, slipping out from cracks and crevices, hollow trees and attics. On silent wings, they harvest swarms of flying insects. These night fliers are small mammals called bats.

Unless you live near the North or South Pole, or in an extreme desert, you're likely to share summer nights with bats. There are nearly a thousand different kinds. Some have wingspans up to six feet wide. Some are active during the day, eating fruit, sipping flower nectar, and catching mice, fish, or birds. But nearly all of the forty kinds of bats in North America are small, fly only in twilight or darkness, and eat flying insects. Little brown bats, a common species, fit this description.

Little brown bats live throughout much of North America. They hide during daylight and find cool, dark places to hibernate through winter. On summer nights they swoop through the air, making sounds that people cannot hear. Because of the bats' secretive habits, people know little about them.

John Taylor is someone who is trying to learn more about these mysterious animals. I met him when he was a university biology student. It was a July night, and we were near Lake Chautauqua in western New York State. I could barely see tree branches against the night sky, so I wondered how John would find any bats to study. Then he showed me a small black box called a bat detector.

lmost immediately after he turned on the detector, it blurted out Bssst, bssst. "That means a bat is nearby," John said. Bats continually make sounds while flying, but they are ultrasonic, that is, too high-pitched for people to hear. The detector senses these sounds and changes them into lower-pitched sounds people can hear.

When the bat detector crackled again, we looked up. A tiny bat swooped and fluttered in the twilight. By its actions, John knew the bat was chasing an insect. Bats find insects in the dark, and avoid obstacles, by using their ultrasonic calls. Their calls echo, or bounce, off walls, tree branches, and flying insects. By listening carefully to the echos, bats can figure out the direction, distance, and even the identity of objects around them.

A bat flies toward any echo it recognizes as an insect. It zeros in, using faster and faster clicks. The bat then grabs the insect in its mouth or, more often, uses its



wings or tail to scoop up the insect. A little brown bat can catch an insect every eight seconds. A colony of five hundred bats may eat over a half million flies, moths, mosquitoes, and other insects in a single night!

That night at Lake Chautauqua the few insects buzzing around were quickly snatched up by the bats that flitted overhead. John explained that we were standing near a bat roost in the attic of an old house. He had placed a special trap there to catch bats. He climbed a ladder up to the roof to check on the trap. When he came down, he was carrying a bag. He reached into it and pulled out a little brown bat.

The bat was barely three inches long. Most of its body was covered with soft brown fur, but its ears and wings were hairless. The bat squeaked and struggled in John's hands. "Aren't you worried about getting bitten?" I asked.

"No," said John. "Little brown bats have too small of a mouth to bite hard." John said that he had gotten shots, though, to protect himself against rabies, a deadly disease sometimes carried by bats. "Very few bats carry rabies," he said, "but on rare occasions, people have gotten rabies after handling a sick bat." To be safe, you should never handle a bat, or any wild mammal.

As he spoke, John clamped a small aluminum band on the





Neither birds nor flying mice, bats are mammals that feast on insects at night and take naps during the day.

bat's wing. The numbers engraved on the band will identify that bat if it is caught again. Some bats have been recaptured as long as thirty years after being banded. John examines every bat he catches and carefully records his observations.

ased on his records, John has found that female bats use warm attics, while males roost in cooler sites in trees, under rocks, and behind shutters. The females use attics because they need a warm place to raise their young. The hollow center of a large dead tree is warm enough

for a bat nursery. But where such trees are not available, hot attics provide the best nurseries. John thinks that little brown bats are becoming less common around Lake Chautauqua because some people have closed off their attics so bats cannot get in.

So, in addition to studying bats, John talks to people about them. He explains why no one should fear bats. He describes their amazing ability to fly in the dark, and talks about the insects that bats eat. Now, instead of trying to get rid of bats. some people are building special bat houses to attract these valuable insect-catchers to their yards.

Ensuring the future of many species of bats will require more than building bat houses. Caveroosting bats are often harmed by disturbance from cave explorers. Some people spread poisons to kill bats. Pesticides used to kill insects sometimes kill bats, too.

For these reasons, many kinds of bats throughout the world are becoming less common. Some species are on the verge of disappearing. Biologists like John believe most species can be helped if more people learn to appreciate these unique mammals.

As they flap through the night on silent wings, bats protect us by devouring millions of insects. These night fliers will continue to emerge when darkness falls only if we, in turn, protect them.

The Softball Switcharound

By Helen Kronberg

atie kicked a dandelion. "Sandy would get to pitch," she said.

Sue rolled her bike away from the rack. "You have to admit she's pretty good."

Katie snorted and pedaled away. "It sure doesn't hurt her to have her aunt as the coach."

"You're just jealous." Sue peered at Katie. "You are jealous, aren't you? You wanted to be the pitcher."

"So what?" Katie asked.

"But you're a good outfielder." Katie shrugged.

"And you're one of the best batters on the team," Sue added.

"Everybody gets to bat," Katie said. "But the game depends on the pitcher. That's Sandy."

Sue's mother waved from

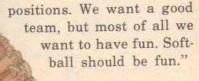
the porch. "See you," Sue said.

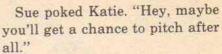
"See you," Katie repeated. She pedaled up the drive next door and slid to a stop. She barged through the kitchen door, grabbed an apple from a bowl on the table, and went to her room. Katie liked the coach, Mrs. Kelly, but she'd like her better if she weren't Sandy's aunt.

"Wow, you sure are grumpy," her brother said at supper.

Katie shrugged.

At the next practice Mrs. Kelly called the players together. "We're going to do some shifting around. I have the feeling that some of you are not too happy with your





Practice lasted a long time because of the switching around. Everyone who wanted to pitch was given a chance.

After practice Katie hopped on her bike and spun around. "I did OK on the mound."

"You do a lot better as an outfielder," Sue said.

Katie tossed her hair. "I just need practice. Do you think Mrs. Kelly will let me pitch in a game?"

"Maybe," Sue said.

Katie twirled her glove into the air and caught it with one hand. "I can see it now: 'The Hawks win another shutout. The pitcher? Katie Doyle, the winningest pitcher around.'"

"The paper doesn't print softball news."

Katie looked at her friend. "It might not be the Hawks, of course. Maybe it'll be the Yankees."

"The Yankees? There are no big league teams for women."

"There might be by the time we grow up. They didn't used to have women electricians or truck drivers, you know."

"Well, good luck," Sue said.

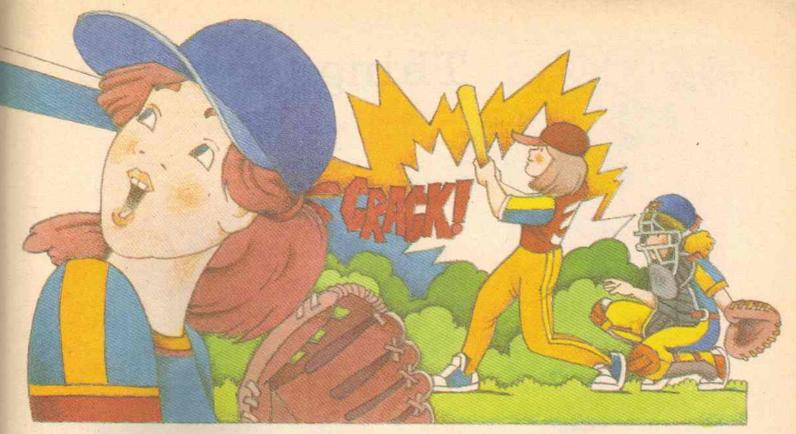
Sometimes Sue helped. Sometimes Katie pitched to her dad or her brother. But every day was practice day.

Finally she asked Mrs. Kelly to let her pitch in a game.

"Are you sure you want to?" Mrs. Kelly asked. "You're such a good outfielder."

"Please?" Katie asked. "I've practiced and practiced."

Mrs. Kelly smiled. "OK, Katie. We'll miss you in the outfield. But we'll let you and Sandy take



turns for one game. How's that?"
"Terrific," Katie shouted.

The day of the game against the Jets arrived. Katie bubbled with excitement.

Sandy took the mound first. She pitched for two innings with no score on either side. Then it was Katie's turn.

She walked to the mound feeling eight feet tall. She cradled the ball in her hand, got just the right grip, and threw, feeling a surge of joy as the ball left her hand.

Crack!

Katie's mouth fell open. Her heart sank clear to her toes. The ball sailed high over her head. "You've got it, Sandy," she yelled. But Sandy didn't have it. The ball slipped right through Sandy's grasp. The Jets' batter raced around the bases and scored.

There were other hits, but no more runs. Katie left the mound with a sigh of relief.

The Hawks managed to score twice. They were ahead. But Katie was nervous about taking the mound again. "Sandy can pitch," she told Mrs. Kelly.

Mrs. Kelly shook her head. "It's still your turn. If you like, Sandy will pitch the last two innings."

Katie gulped and nodded. As she walked to the mound, she thought about the Jets' lineup. She sized up each batter. Then she did her best. She held her breath every time the ball was hit, but the Jets managed only a few short pop-ups.

The Hawks did no better. By the final inning they were still only one run ahead. Sandy was back on the mound, and Katie was back in the outfield. There were two outs and a runner on second base.

Crack!

"It's a home run!" somebody shouted.

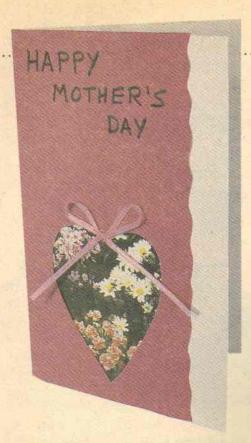
But they shouted too soon. Katie raced backwards and was under it with sure hands. The game was over.

Katie ran to the infield and grinned at Sandy. "You're a good pitcher, but you need practice catching those long fly balls." Sandy nodded. "I felt awful. It was my fault when they scored."

Katie shook her head. "It was my fault. I thought pitching would make me a star. I forgot to think about what's best for the team." She laughed. "Besides, like Mrs. Kelly says, softball should be fun."

She took Sandy's hand, and they joined their teammates in celebration.





Things to Make

Mother's Day Card

By Kathy G. Everett

Fold in half two pieces of construction paper that are the same size but of different colors. Glue a large picture of flowers cut from an old magazine or catalogue to the front of one folded piece.

On the front of the other folded piece, draw and cut out a heart shape. Along the right edge cut a design with scissors.

Place the cut-out piece of paper on top of the one with the picture, and glue it in place.

Attach a bow to the heart. Write a Mother's Day message with markers.

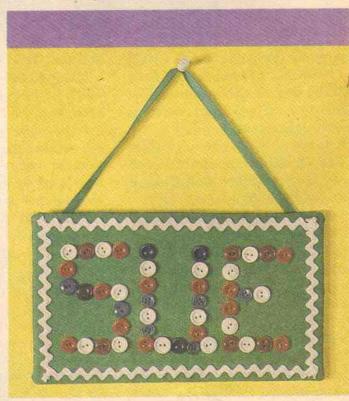
Small Puffy Purse

By Sandra Godfrey

Cut out a circle of felt 9 inches in diameter. About 1 inch from the edge of the felt, draw twelve dots in the same positions as numbers on a clock.

Push a toothpick through the dots, and then thread a shoestring in and out of the holes. Draw the ends of the shoestring together, and tie them in a tight bow.





Button Name Plaque

By Mary Shea

Cut a rectangle shape from heavy cardboard. Glue colored burlap or other fabric over the front and edges of the cardboard. Attach rickrack or narrow ribbon around the edges with glue.

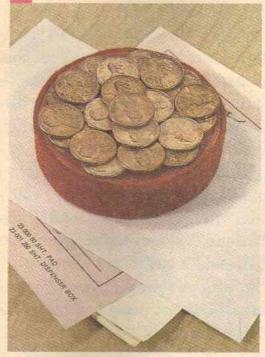
Print a name on the fabric. Squeeze glue on each letter, and gently press buttons into the glue.

When dry, tape or glue a piece of ribbon on the back of the cardboard as a hanger.

Penny Paperweight

By Twilla Lamm

Attach pennies with glue to the top of a plastic jar lid. Cut a strip of felt large enough to go around the lid. Glue it in place.



Rex the Recycler

By Marie Mauney

Use cut paper to create a monster face on the bottom of a large brown grocery bag. Cut a hole for the monster's mouth, slightly larger than a soft-drink can.

Decorate the sides of the monster, making arms, wings or whatever your imagination creates.

Fit the monster bag, face side up, on top of another large brown grocery bag. When you have an empty soft-drink can, give your monster a meal. When the bag is full, remove the monster and store the bag full of cans until you go to a recycling center. Place the monster on another empty bag, and start recycling cans again.



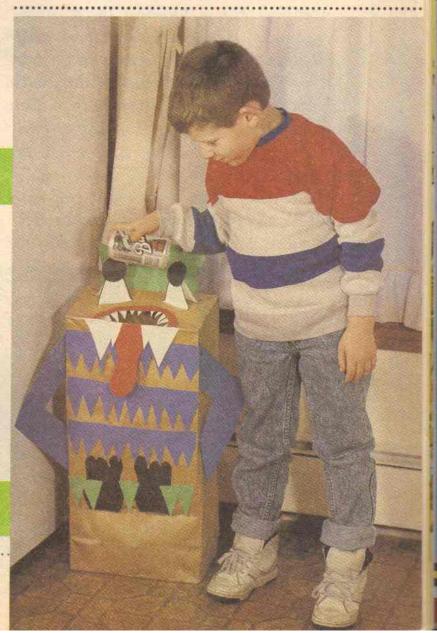
Flower Pin

By Tama Kain

Wash and dry seeds from apples, melons, lemons, or sunflowers.

Cut a circle from lightweight cardboard. Glue a row of seeds, with points in, around the outer edge of the circle. Glue another row of seeds overlapping the first row. Continue to three or four rows. In the center, glue popcorn seeds.

Attach green felt leaves and a safety pin to the back of the cardboard with glue.



By Connie Elliott

The Best Baker

Who will be the King's new royal baker?

Mrs. Swenson put a sign in the window of her bakery. It said The Best Baker in the Land.

Across the street Mr. Olson put a sign in the window of his bakery. It said The Best Baker in the Land.

"I am the best," said Mrs. Swenson.
"No, I am the best," said Mr. Olson.
Back and forth it went, every day.
One day the Mayor said, "The King is coming! He is looking for a new royal baker! If one of you wins, it will be a great honor for the town."

Mrs. Swenson went home and tied on her apron. She baked chocolate chip cookies, sugar cookies, strawberry tarts, angel food cake, and even a gingerbread house.

Mr. Olson went home and put on his tall white hat. He baked devil's food cake, oatmeal cookies, brownies, nut muffins, apple pie, and even a five-layer wedding cake.

On Saturday morning Mrs. Swenson and Mr. Olson spread their cakes and cookies and pies on two long tables in front of Town Hall. The townspeople crowded around.

The Mayor welcomed the King. The King walked up and down beside each table. "Where is the bread?" he said.

"Bread?" said Mrs. Swenson.

"Bread?" said Mr. Olson.

"I am a simple man," said the King. "I want bread. Plain bread."

"You must bake bread for the King!" cried the Mayor.

"I have only a little flour and milk left," said Mrs. Swenson.

"I have only a little yeast and butter," said Mr. Olson.

"Fine. Then together you can bake



PROSEDIO REINO ROLLA DE LA CONTROL DE LA CON

bread," said the King.

Mr. Olson took his yeast and butter over to Mrs. Swenson's bakery. Mrs. Swenson put on her apron. Mr. Olson put on his hat. They mixed the dough.

"Now we must knead," said Mrs. Swenson. She put the dough on the table. She folded it over and pushed. Whoosh.

"Not like that, Noodlehead!" cried Mr. Olson. "Knead it like this!" He slapped the dough against the table. Whack!

"Butterbrain!" said Mrs. Swenson. She folded and pushed the dough. Whoosh.

"Puddinghead!" cried Mr. Olson. He grabbed the dough. Whack!

Whoosh. Whack. Back and forth it went.

It was time to put the dough in the oven. "The oven is too hot," said Mrs. Swenson. She turned it down.

"The oven is too cool," said Mr. Olson. He turned it up.

Hot. Cool. Back and forth it went.

The Mayor ran in. "Hurry! The King is getting impatient." He grabbed the bread from the oven and raced down the street, with Mrs. Swenson and Mr. Olson behind him..

"Olson ruined the bread!" cried Mrs. Swenson.

"Swenson ruined the bread!" cried Mr. Olson.

"I will decide," said the King. He tasted the bread. He smiled. "This is the best bread I have ever tasted. You will both be royal bakers and bake my bread together."

The crowd cheered, "Hooray!" The Mayor beamed.

So once a week Mrs. Swenson and Mr. Olson bake bread together. Shouts of "Puddinghead!" and "Butterbrain!" ring in the street. But the bread is always very good.

"Because I am the best baker," says Mrs. Swenson.

"Because I am the best baker," says Mr. Olson.



Jokes

Selected by Our Readers

Tommy: "Why do you have that watering can?"

Dan: "I'm going to water the flowers."

Tommy: "But it's raining."

Dan: "That's OK. I'm wearing my raincoat."

Lauren Roven-Georgia

Doctor: "How did you get here so quickly?"

Patient: "Flu."

Ashley Katen-Wyoming

Christopher: "Have you lived here your whole life?"

Adrian: "Not yet."

Joanna Lovering-New Jersey

Teacher: "Billy, why are you here so late for class?"

Billy: "There are eight people in my family."

Teacher: "Yes?"

Billy: "The alarm clock was set for seven."

Andrew Drain-Washington

Jim: "I ripped my shirt, and my mom tried to fix it."

Kim: "How did she do?"

Jim: "Sew-sew."

Jessa Watters-Ohio

Send the funniest joke or the best riddle you ever heard, with your name, age, and full address (street and number, city or town, state or province, and Zip Code), to:

HIGHLIGHTS FOR CHILDREN 803 Church Street Honesdale, PA 18431

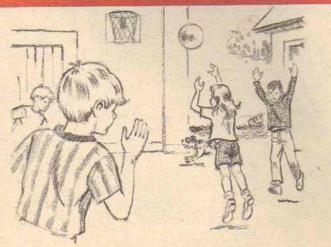
Goofus and Gallant



Goofus hogs the water fountain so no one else can get a drink.



"Your turn, Angela."



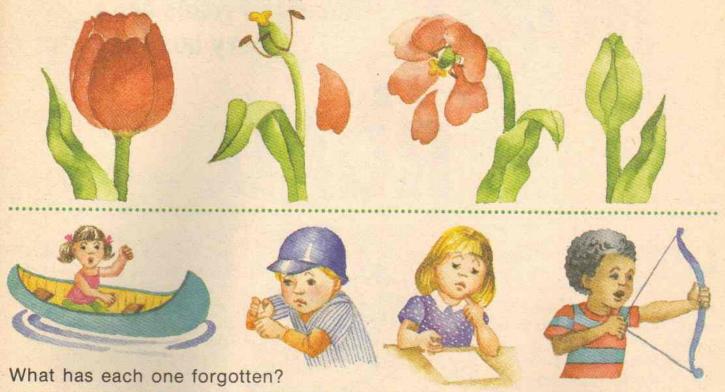
"You'll never make the team.
You're pitiful!"

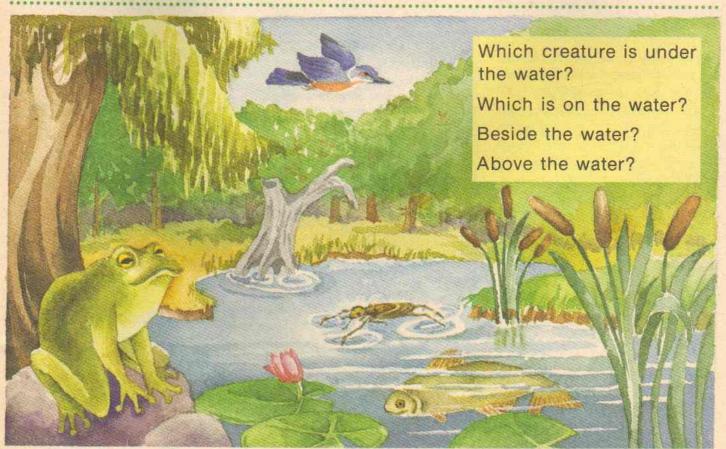


"Don't be discouraged. You're pitching better everyday."

For Wee Folks

What happened first? What happened next? And then? Last?





Here a ROAD,

Take a look at a map.

American roads are a crazy quilt of history.

There a ROAD

By Connie Lockhart Ellefson

ook at these two maps. One is Washington, D.C., and the other is a section of New York City's Manhattan Island. The maps look quite different from each other.

Downtown Washington has streets as straight and square as a checkerboard. Diagonal streets cut across the checkerboard, connecting important governmental buildings like the White House and the Capitol Building, as well as historical monuments.

The lower streets of Manhattan Island, however, look as if some-body threw down a bunch of giant pick-up sticks and wherever a stick landed, a street appeared. Why did these two places end up so differently—one a hodgepodge of streets, the other a tidy and dignified layout?

Here's the answer. Washington, D.C., unlike almost any other city in our country, was *planned* from the beginning. The streets were



The orderly streets of the nation's capital, Washington, D.C., were planned before many people lived there. An engineer drew up a design. Then more people moved in.



In Manhattan the first roads were built helter-skelter, without a plan or design. People settled near the water, then made roads as needed.

laid out before any buildings were built. George Washington hired a French engineer, Pierre L'Enfant, to develop a city plan that would be elegant and formal. He hoped this would inspire the lawmakers and officials gathering in the capital of the new nation to realize how serious and important their work was.

But Manhattan developed just as many other cities or towns in our country did. The first settlers built right next to the water (a harbor, a river, or even a spring), and the later ones added streets as close as they could. In the upper parts of Manhattan, which developed later, the streets follow a more orderly pattern.

In other harbor towns, a few main streets radiate out from the central part, like spokes in a wheel. They are used, as they were long ago, to transport all kinds of goods between the wharves and the surrounding areas.

How might a plan for city streets develop?



S PRI

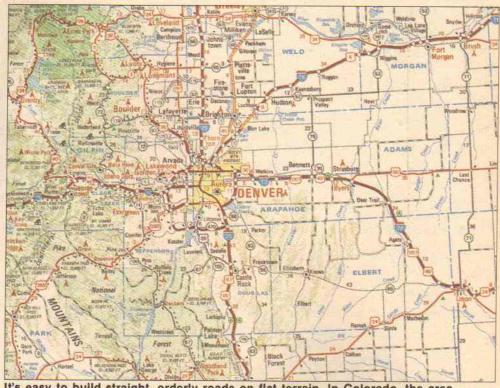
RURAL

How might a system of country roads develop?

map of the United States presents another puzzle about American roads. In states in the East and Far West, roads run off in every possible direction. But in the western plains states, the roads all seem to be as straight as possible, running north-south or east-west along rectangular pieces of land.

The explanation is quite simple. The eastern part of the country was very hilly. It was densely wooded when the first settlers arrived. Building roads meant clearing lots of trees and going around lots of mountains. So, when they couldn't rely on water transportation to get where they wanted to go, the settlers often used Indian trails. The Indians had likely followed the paths animals took through the woods to go from feeding grounds to watering places. Soon, carts and wagons were pulled over the footpaths, and gradually the trails developed into main routes for modern vehicles.

When such flat plains states as Iowa, Kansas, and Oklahoma were settled, however, it was easy to lay out and construct straight roads. A look at road maps for those states shows the checker-board pattern of roads to be almost uninterrupted except for an occasional river or diagonal highway connecting two large cities.



It's easy to build straight, orderly roads on flat terrain. In Colorado, the area east of Denver is flat and the roads run in square patterns, mostly going north-south or east-west. But near Denver and to the west, mountains get in the way, so the roads twist and wind in many directions.

A perfect example of the contrast in road patterns is in the state of Colorado. The western half of the state features few highways, and all of them are set at odd angles in the rugged Rocky Mountains, where road building is very difficult. The eastern part of the state is as flat as Kansas or Oklahoma. There, roads are plentiful and laid out mostly in squares.

A study of our roads is partly a study of our history. The crazyquilt pattern of roads in the oldest parts of the United States reflects the eagerness of the early settlers to explore and settle the land. As the land became more crowded, people needed a better way to measure their land than "from the old oak down to the river." In 1785 a system was devised dividing the country into squares, and roads developed around them in gridlike patterns.

People who plan cities today try to use fewer squared-off blocks of streets. They prefer to build curving, meandering roads when they develop new residential areas of towns or cities. That makes neighbrhoods safer and quieter by slowing down traffic.

If you look at a map of your favorite town, can you see why it developed as it did? As you walk or ride around your town, can you imagine how some of the roads were once traveled?



Cuckoo! Cristina May Cabilso, Age 10 Bacolod City, Philippines

Catch me the birds!

Catch me the sky!

Catch me the sun!

Catch me the people!

Kite-

Kite-Please.

Kite-

Kite-

Please.

Please.

Marcos Roybal, Age 3

Pecos, New Mexico

Please.



Kenny Kisamore, Age 12 Armagh, Pennsylvania

Birds

Birds go over the ocean. Birds go over the sea. Birds go everywhere But they can't catch me. Christopher Gessner, Age 6

Casa Grande, Arizona

Flower

As it sits there The warm winds blow. It looks like a little rainbow. It's perfect. It stays swaying Until someone picks it And then it wilts away. Amy Ozuna, Age 11 Jakarta, Indonesia

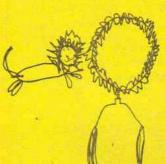


Matty Steinfeld, Age 14 Monsey, New York

The Pretending

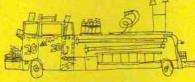
I pretend the stars come to me in the night. They tickle me with their points.

Lydia Gage, Age 6 Cobleskill, New York



Circus Lion Jessica Thompson, Age 5 Lawrenceville, Georgia

Mother and Daughter



Engine Company #20 Jonathan Newton, Age 8 Chicago, Illinois



My Dad and His Newspaper Carolyn Adams, Age 9 Omaha, Nebraska

Soft Sounds Are . . .

A soft sound is the wind gliding down the street on a warm fall day.

It's a kitten's purr.

A soft sound is two friends whispering something. It's someone singing softly. A soft sound is the pages

turning in a book. It's a pencil writing something.

A soft sound is very quiet. Sarah Troedson, Age 10 St. Louis Park, Minnesota



Alex, My Boston Terrier Madison Hamilton, Age 3 Paris. Texas

My Hamster

I have a hamster. His name is Homer, Homer the Hamster, Jr. He sleeps all day, He plays all night, And he makes a mess When he eats.

Misty Jenkins, Age 8 Burlington, Kansas

Don't Wake Me Up

I went to bed And got to sleep. An owl said,

"Whooo-ooo-oooo!" Don't wake me up again, Please.

Daniel Quintiliani, Age 5 Dingmans Ferry, Pennsylvania

With the sound of rolling water The woman's daughter is trying to catch the bubbles That drift in the air.

Mother and daughter care for each other, Love spending time together. Their love will stay forever.

Secrets and stories are told from far long ago. The warmth of their hugs feels like fire. That's why mother and daughter are always close. Ritu Bhardwaj, Age 9

Lakewood, California



Old-Fashioned Times Rachel Hamrick, Age 11 Point Pleasant, West Virginia



Monster Roller-skating Scott McIntyre, Age 4 Claremont, California

The Lighthouse Amanda Marie Meyer, Age 7 Racine, Wisconsin

Desert

Dry, brown tumbleweeds spin freely.

Sunbaked rocks, barren dunes, noisily thunderclouds rain.

David Zolandz, Age 10 Wilmington, Delaware

Once a flounder was swimming in the sea. He saw a goldfish. He saw a lobster. He saw another fish eating plants. He quickly swam away before he himself was eaten.

Leslie Vitale, Age 5 Convent Station, New Jersey

A Fishing Poem

Fishing is my favorite thing to do. What I wouldn't do to go out.

Put bait on a hook And catch a fish. Fishing is for the people

Who are patient And wait.

All you need is a pole, Bait.

And a couple of hooks.

Bryan Nash, Age 12 Renton, Washington

On the other side of the mirror there's the outline of a person with all his thoughts and dreams inside, waiting to come out and tell the world.

On the other side of the mirror there's the outline of a person that not too many know.

On the other side of the mirror there's the outline of a person who keeps to himself, who doesn't talk much. but listens always.

On the other side of the mirror is the other side of me.

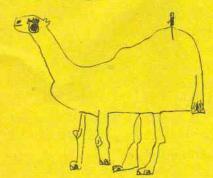
Peter De Young, Age 13 Winnetka, Illinois

A Pen Is Magic

A pen is magic writing a poem, maybe a story or song. Maybe it tells of rock and mountain. Maybe it tells of a beautiful fountain. But whatever a poem, story or song tells of.

the pen wrote it all. So the pen is magic.

Janet Purdy, Age 7 Seattle, Washington



Camel and Rider Brendan Butz, Age 6 Riyadh, Saudi Arabia



How the moon shines, Randolph, Kansas And no lights at all. Just black in the sky With stars glistening through. The cars are all gone. Just the dreams of tired people. But in other countries it's probably morning. With the sun rising up.

Chad Almond, Age 8 Stone Mountain, Georgia



Ryan Peterson, Age 10

Flying Grandma

Some grandmas sew. Some sit in a rocking chair. But my grandma tops them all-She flies high in the air.

John Stephen Skakandy III, Age 9 Tequesta, Florida

Glistening River

Glistening river sparkles in the sun. It glows like a fire at dawn. The beautiful water accents the glowing horizon. In the spring rain the river becomes a pool of rings with rocks as shore, with moss of green.

Slowly the rocks meet the water which creeps in between each rigid rock. Over the years, generations look upon God's miracles, and slowly each year as the glistening river changes, we see it differently.

Heather Hemesath, Age 12 Waverly, Iowa

Are you thinking of sending a story, poem, or black-andwhite drawing to Our Own Pages? Be sure that it is your very own creation, and that you haven't seen or heard it somewhere else. Include your name, age, and complete address (street or box number, city or town, state or province, and Zip Code). Mail to:

HIGHLIGHTS FOR CHILDREN 803 Church Street Honesdale, PA 18431

We will print some of the poems and drawings from our readers. Sorry, we cannot return any work that is sent to us.



Hula-Hoop, Anyone?

Beth Robinson, Age 12

St. Ignace, Michigan

Bethany Joy Tobin, Age 6 Hua Hin, Thailand



The Farm at Dawn Michael Flores, Age 11 Chicago, Illinois

Aloysius and the Guided Muscles

By Sydney K. Davis

One hot summer day
Aloysius stepped
onto his front
porch. Across the
road and up the hill
he could see Samuel Samuel
Wolf, hard at work digging in

his garden.

"What could he be digging?" wondered Aloysius. He rocked lazily back and forth on his porch swing. "Samuel can't be planting, because he's digging in just one spot."

Aloysius plumped up the soft pillows on his swing and snuggled down for a nap. He heard the sounds of bees humming and birds chirping, and the faint voice of Wanda Wolf singing as she hung her wash out to dry. Soon Aloysius was asleep. He slept a long time.

When he woke up, he looked across the road. He didn't see Samuel, but he saw dirt flying from a hole.

"Samuel has dug himself into a hole," Aloysius said to himself. "I'd better run over there and help him."

Aloysius scrambled down a path, across the road, and up the hill to Samuel's garden. He looked over the rim into the hole. There was Samuel, at the bottom.

"Just a few more feet to go," shouted Samuel, "and I believe I'll strike water. Digging a well sure is hard work."

"It's only hard if you don't think," said Aloysius. "When you use your muscles instead of your brain, work is always harder."

"I'd like to know how you can dig a well without using your muscles," growled Samuel, who was tired and grumpy.

"You have to use both," said Aloysius. "But if you let your brain guide your muscles, you don't have to work as hard."

"I don't have time to listen to you preach," Samuel muttered. "It's late afternoon, and I have to finish by dark. Wanda is baking chicken pot pie. She invited me over for supper."

"Sounds yummy," Aloysius said, dodging a shower of dirt that Samuel pitched from the well. "If I tell you a quick way to finish digging the well, can I come to Wanda's?"

"There isn't a quick way to dig a well, silly," said Samuel as he stepped on his spade and pushed it into the dirt.

"Maybe not," said Aloysius.
"But when you throw the dirt out, most of it falls back in, so you have to shovel it out twice."

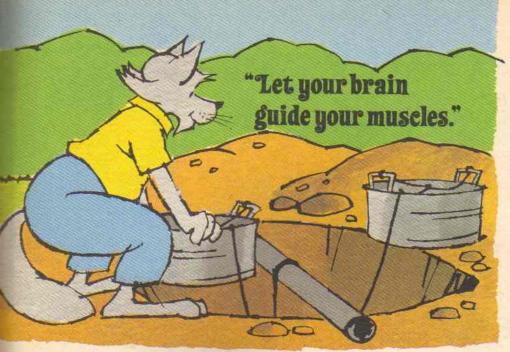
"And just how do you think it should be done, smarty?" asked Samuel, rubbing his back.

"Simple," said Aloysius. "I'll tie a washtub to each end of a rope. Then I'll lay a pipe across the well and hang the rope over it. When I lower a tub, you fill it up with dirt. I'll climb into the other tub, and when my tub goes down, the tub of dirt will come up. We'll take turns going up and down, and we'll be done before you know it."

"Are you sure you know what you're talking about?" Samuel asked.

"Of course! It's like scales—as one end is weighed down, the other end rises."





"OK," said Samuel. "You get the rope and the tubs, and I'll keep digging until you get back."

Soon Aloysius returned. He had a stout piece of iron pipe and a rope with a tub tied to each end. He laid the pipe across the top of the well, put the rope over it, and lowered a tub to Samuel.

When Samuel had finished filling the tub with dirt, he called, "Go ahead. Pull it up."

"Pulling it up is not the smart way," said Aloysius. "That uses muscles without brain. Watch this." He stepped toward the tub.

"No! Don't get in!" Samuel yelled. "If you come down, we'll both be down here. Who will be up there to empty the tub?"

"Oh dear," said Aloysius. "I'll have to think about this." Finally

"You got me wet!"

he said, "Instead of getting into the tub, I'll fill it up with rocks. When the rocks weigh more than the dirt, they'll go down and the tub of dirt will come up. You keep filling tubs with dirt and sending them up, and I'll keep dumping tubs out and filling them with rocks. We'll be done in no time."

"Hurry up," shouted Samuel.
"Water is seeping into the well.
It's filling up with me in it!"

Aloysius scrambled to find big rocks. He filled the tub and sent it into the well, which brought up the tub of dirt. He emptied the dirt, filled the tub with rocks, and sent it down again. But when it reached the bottom, Samuel cried, "You're filling my well up with rocks!"

"Oh my," said Aloysius as he peered into the well. "I'll have to think again."

"Think?" shouted Samuel. He splashed around in the well. "You can't think. You have a muscle where your brain should be!"

Aloysius was hungry, and his thoughts turned to Wanda's crusty chicken pot pie. "Listen, Samuel. The sun is setting. Maybe I should walk over to Wanda's house and tell her you'll be late for supper."

"Oh no you don't," Samuel yelled. "You're not leaving me here to drown."

"Is the water coming in that fast?" Aloysius asked. He tried to see into the dark well.

"It's nearly up to my waist now," cried Samuel.

"Then you've struck water," Aloysius laughed. "And thanks to my plan, you have a nice solid floor of rocks at the bottom of your well. Hop in the tub, and I'll pull you up."

"All your plan did was get me wet," Samuel grumbled. After he got out of the well, Samuel took a warm bath. Then he and Aloysius started down the road to Wanda's. They could smell chicken pot pie.

"Yummy," Aloysius said. "I think I smell green beans, too."

"I'll use my new well to water my garden," said Samuel. "Then I can raise all kinds of tasty vegetables."

"I'll help you water them," said Aloysius, "if I can help you eat them."

"I suppose so," said Samuel. He knocked on Wanda's door. Soon they were all eating her delicious chicken pot pie.



Camp and Carry

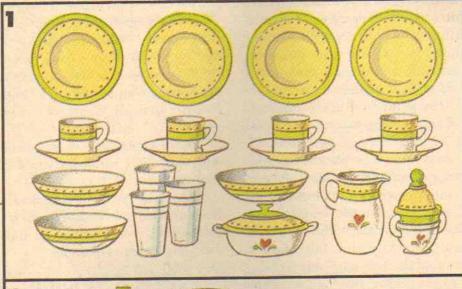
Suppose you were packing for a camping trip. Which of these things might you carry in your pockets? Which might you put in a knapsack? How would you carry the others?

pocketknife tent sleeping bag whistle cooking gear

compass food map flashlight fishing rod

OOPS!

When helpful Hattie was putting away the dishes, she accidentally broke some. Can you tell which ones? The ones she broke are missing from panel 2.





Riddles

Selected by Our Readers

- 1. What is the quietest sport? Luis DeLaRosa-Indiana
- 2. As I was going to St. Ives, I met a man with forty wives. Each wife had forty sacks. Every cat had forty kits. Kits, cats, sacks, and wives, How many were going to St. Ives? Krista Greer-New York

3. What can give you the power to see through walls?

Miriam Ghosn-California

4. Why did the music student bring a ladder to class?

Kevin Tan-Ontario

5. What has arms and legs but no head?

Elizabeth Reider-South Dakota

6. Why did the little ghost become a cheerleader?

Katy Bowser-Texas

- 7. What has teeth but can't eat? Kate Ebner-Illinois
- 8. What do you lose every time you stand up?

Kara Paulus-Wisconsin

9. If you had six apples in one hand and seven in the other, what would you have?

Ted Willis-North Carolina

- 10. What do a bad joke and a dull pencil have in common? Elizabeth Preston-South Carolina
- 11. What is the best month for a parade?

Toni Russo-Washington

lap. 9. Big hands. 10. They both have no point. needed a little team spirit. 7. A comb. 8. Your him to sing higher. 5. A chair. 6. The school 3. Windows. 4. Because the music teacher asked All the others were going the other way. 1. Bowling. You can hear a pin drop. 2. One.



But I Did Not Say Anything

By Beth Bahler

y sister sewed me a smock for art class, and one side is a little longer than the other side, but I did not say anything.

My dad made a table for me, and one leg is a little shorter than the other three, but I did not say anything.

My cousin said he would be steady pitcher, and he did not throw one ball into the strike zone, but I did not say anything.

My aunt sent me the same birthday present she had sent me a year ago, but I did not say anything.

My best friend said he would come over yesterday, and he forgot and went to someone else's house, but I did not say anything.

I went to the kitchen to get some potato chips, and someone had put the bag back empty, but I did not say anything.

Today my brother and his friend ran through my room and knocked over a whole city of blocks I had just finished building, and THEY did not say anything.

So I said a few words . . . and then I said a few more words.

Sometimes a person has to be understanding and sometimes, just sometimes, a person has to YELL.



hat would you do if you owned an aquarium for ocean animals and one of your dolphins got sick? How would you take the dolphin to the veterinarian? You could not scoop it out of the water with a net, because that would frighten and maybe injure it. A dolphin's skin is soft, and might be cut by the knots in the net. It might even drown, so you wouldn't do that.

You could throw away most of the water in the pool so the vet could just walk up to the dolphin in the shallows. That is a good way. But it costs money to filter and treat a half million gallons of salt water. Throwing away all that water would cost you about a thousand dollars, so you probably wouldn't want to do that, either.

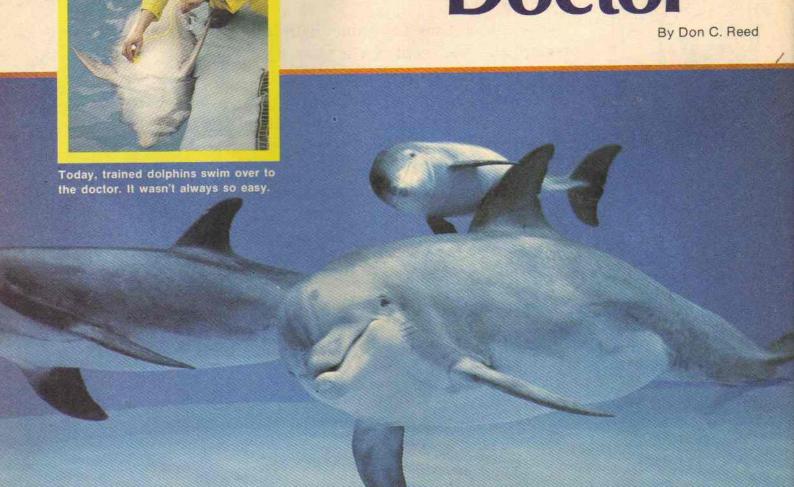
The old-fashioned way is to catch the dolphin, getting into the water with the animal. That was what we did when I was head scuba diver for Marine World in northern California from 1972 to 1987.

Wearing wetsuits, swim fins, and masks, the other divers and I would put a net in the water. This was not to catch the dolphin, but to give it less room to swim. Then we pushed the net close to the wall, so we had a narrow "piece" of water, maybe thirty feet long and ten feet wide and deep. Then we swam over the top of the net, in with the dolphin.

Holding my breath, I would swim slowly down and try to put my hands gently around the

D

Dolphins to the Doctor



dolphin's smooth back and sides. Sometimes, if I was careful and moved very slowly, the dolphin would hold still for me, and let me take it to the top.

But sometimes the dolphin would not let me take it gently, and then things could get rough. Dolphins look cute, but they are big—bigger than professional football players. Dolphins can weigh as much as five hundred pounds. They are fast enough to leap twenty feet straight up out of the water, and strong enough to knock out a shark.

Sometimes I would swim too close to a dolphin, and whoosh! it would be gone. There would be just a stream of bubbles and a swirl of moving water where the animal had been. I would just have to hold still for a moment, let the animal relax a little, and then swim after it again. I hoped it would not leap over the net.

Usually dolphins do not jump over nets. In the wild, they swim right through seaweed, and that is what a net looks like to them. When they poke against a net and it doesn't separate the way seaweed does, the dolphins get confused and back away. When a dolphin gets "net smart," it will lift the bottom of the net and go underneath, or just leap right over the top. Then we would have to swim back and forth across the tank, setting up the net again and again. Sometimes it took hours, and afterwards, the divers crawled exhausted out of the tank.

Dolphins can fight, too. When we would make "the grab," a sort of swimming tackle, they would sometimes wrestle us off in a kind of dolphin judo. The idea for the diver was to hang on until his buddy got there.

Sometimes the dolphins would fight us, which surprised me at "Say ahh." Dolphin doctors check for infection and other problems.



first. It is true that dolphins are "nice" creatures, who seem to like people. They often played with us, and they almost always held back their strength so that they did not harm us. But no dolphin wants to be caught.

When they decided to get rough with us, it was usually not with a bite, although once in a great while they might give a quick nip. I have a scar on my left hand from a dolphin named Arnie.

n a life-or-death fight, as against a shark, a dolphin will charge full speed and ram its enemy in the gills or the liver, sometimes killing the shark.

Against divers, the dolphins fought with head and tail. I have seen an excited male dolphin swim from diver to diver giving out head thumps and tail slaps, quick as the star in a karate fighter movie. Once, a dolphin used its hard beak to break the lens on my face mask.

I could not blame the dolphins for fighting back. In the wild, the only time an animal is caught is when it is going to be eaten. Today we know that the best way to get a dolphin to the doctor is to train it to swim over to the vet. Recently I watched a dolphin



The author was once nipped on the left hand by a dolphin named Arnie.

practice being taken to the doctor. There was not anything wrong with the dolphin, but in a couple of weeks a veterinarian would give the animal a checkup. This was just a teaching session so the dolphin would know what to do when it was time for a shot or an examination.

he veterinarian's assistant, Mary Fleming, blew a whistle, and a dolphin swam right over to the side of the tank. Mary leaned out and touched the dorsal fin on the smooth wet back, to get the dolphin used to being handled. Mary put a stethoscope in her ears, and used the flat end to listen to the dolphin's chest. She even took a metal dinner fork and poked the dolphin on the tail, gently-not hard enough to break the skin, just enough that it would get used to the feel of a shot. Finally, Mary blew the whistle again and gave the animal a fish reward, because it had held still.

This is the way dolphins go to the doctor today. It is a good way: gentle, easy on the animal. When I remember how hard we used to work to catch those dolphins, I'm glad the trainers have found an easier way.

Don C. Reed is the author of The Dolphins and Me, published by Sierra Club Books.

Headwor

Start at the beginning and see how far you can go, thinking of good answers from your own head.



What color is your hair? Are your feet the same color as your hair? What's the difference between a friend and a stranger?

Why do we cook eggs before we eat them? Why don't we cook oranges?



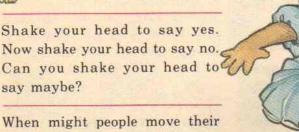
Pretend you lost all the buttons on your shirt, and there were no more buttons left in the world. What might you use to keep your shirt closed?

When is the last time you felt happy? When is the last time you felt sad? How do you feel right now?

How many parts of a car can you name?



Many people once believed that the Earth was flat. Why do you suppose they believed that?



When might people move their lips without saying anything out loud?

Sharon and Ben were watching a baseball game on television. "It's a windy day at the ballpark," said Ben. How did he figure this out?

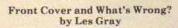


"Here's your milk," Mr. Weldon said to Otis. "That'll be one dollar." Where do you think Otis is? Who is Mr. Weldon?

What are some of the differences between a farm and a ranch?

"Try these on," the woman said to Hooper. "You'll see everything much more clearly." Who might the woman be? What was Hooper trying on?

Why do most people want to save money?



A grateful acknowledgment for the following permissions: P. 6 "The Spinning Earth" from I Wonder How, I Wonder Why by Alleen Fisher. Published by Abeland Schuman, New York Copyright # 1962 by Alleen Fisher. Copyright renewed. Reprinted by permission of Alleen Fisher: pp. 8-9 Photos courtesy Norwegian Tourist Board: p. 16 Bottom photo courtesy UPI/Bettmann: pp. 16-17 Top photo courtesy Metropolitan Opera Association Archives: p. 18 Top photo courtesy University of Pennsylvania

School of Veterinary Medicine; pp. 22-23 Photos by Merlin D. Tuttle, Bat Conservation International; p. 32 Bottom map © 1970 by Rand McNally & Co. Reprinted by permission of publisher; p. 33 Map © 1989 by American Automobile Association. Reprinted by permission: p. 40 Bottom photo courtesy Sea World, Orlando (FL), inset photo and top left photo on p. 41 by DarrylW, Bush, Marine World Africa USA, p. 41 top right photo courtesy of author.

BEWARE CF HIRACY FOR

ANSWER: "OOPS!" (page 38) Three saucers, one cup, one bowl, and a glass were broken.



When do three 3's equal 4?

2 14/4/4

Which person is paddling the fastest?

Mr. Harris owns a peacock If the peacock laid an egg on the neighbor's lawn, who would own the egg, Mr. Harris or the neighbor?



How many ways can you think of to change a dollar into fifty coins?

and Tea

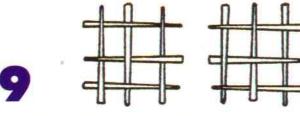
The numerals 1 through 9 are in this picture. Can you find them?



What is it? The beginning of eternity, The end of time and space, The beginning of every end, The end of every race.

Think of a number. Double it, add 10, and divide by 2. Then subtract the first number you thought of. The answer will always

Twin sisters Kara and Tara were walking past some children. "Hello, Aunt Tara," they cried. "It's great to be an aunt," said "I wouldn't know," said Kara, "because I have no nieces or nephews." How could that be?



If you were to pick up these two woven sets of toothpicks, which set would hold together?

Answers:

of the children. 9, The toothpicks on the left. OR forty pennies, eight nickels, and two dimes. 6. The letter e. 8. Kara is the mother eggs. Peahens lay them. 4. Forty-five pennies, one quarter, two nickels, and two dimes, because the flag on his boat is extended. 3. Neither would, because peacocks don't lay 1. 3% = 4. 2. You can tell that the person in the middle cance is paddling the fastest.

Illustrated by Mark Stush

